tubulis contortis is unaffected, and consequently the secretory function of the organ is unimpaired. The free secretion of urine by the tubulis contortis may possibly, by *vis a tergo*, free the tubuli recti from any cylindrical formations. An anticipatory excitation of diuresis is, therefore, desirable. To promote a return to the healthful condition, in cases of parenchymatous nephritis, nitric acid has been very highly spoken of. D. F. C.

12. *Roseola Variolosa.*—Dr. Duffin read before the Clinical Society of London (*Medical Times and Gaz.*, April 1, 1871) notes of two cases of roseola variolosa that had come under his notice. In the first, some six hours after a severe rigor, a thickly-set, papular rash appeared. It was strictly confined to the surface of the abdomen and the inside of the thighs, thus occupying a triangular space, with its base upwards. The rash blanched on pressure. The patient presented the signs of severe febrile disturbance. After forty-eight hours the eruption became purpuric, and at the end of an additional twenty-four hours, uniformly confluent. The regular papules of smallpox then appeared on the face. The patient had two imperfect vaccine marks on his arm. The case ran a moderately severe course up to the period of the secondary fever, when the disease aborted. In the second case, a papular rash, in all respects similar to the other, appeared on the arms and thighs of a girl twenty-four hours after severe rigors. The rash here also became purpuric on the third day, and on the fourth a modified smallpox eruption occupied the face. This patient also had been vaccinated. In reliance on the descriptions of Hebra and Trousseau, Dr. Duffin contended that where these limited rashes occurred they were pathognomonic of the appearance of smallpox, the diagnosis of which would be much accelerated. In vaccinated subjects they had little prognostic importance, but in the unvaccinated they were extremely formidable. No proper smallpox rash seemed to invade the purpuric area, which gradually faded as the disease evolved.

Dr. Fagge confirmed the accuracy of Dr. Duffin's description. He saw a patient some time ago with the rash, and next day there were papules of smallpox. A man came into hospital with purpuric blotches, and passing blood. He died, as Dr. Wilks thought, from smallpox; but he had been ill over forty-eight hours, and there were no papules. Nevertheless, twelve days thereafter several patients in the same ward and the ward clerk were attacked with true smallpox, there having been no other case in the ward.

Dr. Broadbent had altogether seen eight cases like those mentioned by Dr. Fagge. The first exactly resembled a case of scarlatina, but was rather deeper in tint. There were slight throat symptoms; hemorrhage followed, and the patient died. There were no papules, though life was prolonged to the fourth day. The rash had been more or less general in all he had seen. With the eruption there had been a period of absolute comfort. Hemorrhage had come on, and death followed.

13. *Local Applications in Variola.*—At a late meeting of the Société de Thérapeutique, M. Deliou stated (*Gazette Méd. de Paris*, No. 12, 1871) that the plan which he had found to succeed best was the application of a mixture of collodion and castor oil with the addition of 1-100th of bichloride of mercury. M. Féreol stated he was of opinion that this application was useful in confluent varioloid, but that it was of no value in true variola when confluent. M. Deliou, however, held in reply that it had proved equally satisfactory in both forms.—*The Practitioner*, May, 1871.

14. *Clinical Experience of Chorea.*—Prof. Steiner gives the results of his observation of fifty-two cases of chorea treated in the children's hospital at Prague. Of this number, three cases were fatal. The *first* was a boy of 8½ years, who was seized with chorea, after falling down a cellar step, and the autopsy pointed to a growth of cellular tissue in the substance of the spinal marrow as the probable cause of the disease. Chorea came on *in the second case*, a little girl of 9 years old, a few days after she had been playing, and with back to back and hands over her head had been swinging her companion. She

died, and an abundant extravasation of serous fluid into the spinal cord, with hyperæmia of the cord and its meninges, was found after death—changes which appeared to be the result of her violent exertion, and the cause of the chorea. This conclusion was confirmed by four other similar cases resulting from the same cause, which recovered. *In the third case*, a boy 6 years old, it was proved that the chorea was the expression of an inflammatory exudation into the spinal canal, following an attack of articular rheumatism with consecutive peri- and endocarditis. The patient was improving, when sudden serous effusion into both pleuræ with acute œdema of the lungs supervened. Out of 252 cases the author has only seen four cases occur *in the course of acute articular rheumatism.* He regards the frequent coincidence of the two diseases in France as due to some local influences, but comes to the conclusion that acute rheumatism, with or without endocarditis, may cause chorea *in a certain number of cases.* He does not agree with those French authors who look upon acute rheumatism and chorea as but one disease expressing itself in a twofold way, though it is easy to see the connection between the two diseases. Its clinical course, no less than its anatomical appearances, proves that acute rheumatism has a great tendency to affect the serous membranes, and in certain cases the disease localizes itself not only in the joints, but also in the spinal membranes, the irritation of which produces the symptoms of chorea. In other cases the author considers chorea to depend essentially *upon a disturbed nutrition and an increased excitation of the spinal marrow.* The cause of this spinal irritation is, in the majority of cases, anæmia and a faulty condition of the blood, a conclusion borne out by the consideration of the following facts:—

1. Children who suffer from chorea have generally grown rapidly; are of tender build; weakly; anæmic. 2. Certain acute infectious diseases—viz., scarlet fever, measles, typhus—often cut short the chorea altogether, or temporarily. 3. A nutritious diet and tonics have a beneficial influence upon the disease. 4. Blowing murmurs are audible over the heart and in the veins, which disappear as the patient improves.

This condition of anæmia is frequently associated with irregularities of growth and development. Chorea generally occurs between the ages of 5 and 11 years, or during the period in which the teeth and the sexual organs become developed, and in many cases might be called, the author thinks, a disease of development.

In a smaller number of cases, the spinal irritation seems to arise from changes in the spinal cord and its membranes; as, for instance, in the case related above, in which a growth of cellular tissue was found in the substance of the cord. It is possible that in many cases similar recent growths have been present without being discovered; hence, a thorough microscopical examination of the spinal cord is most essential to the right understanding of the true nature of chorea. The growth may be small, circumscribed, or diffuse; may cause slight or serious mechanical irritation; and the symptoms vary accordingly. In short, the author regards chorea as an irritation of the spinal cord, induced and maintained (1) by anæmia, (2) hyperæmia, (3) serous and hemorrhagic exudations, (4) by new growth and organic changes in the region of the spinal marrow and its membranes. This spinal irritation may have a traumatic or a rheumatic origin, or may result, as above, from some anomalous conditions of development and growth. The author therefore classes chorea amongst affections of the spinal cord.

The course of chorea is generally chronic. He has only seen one acute fatal case. In some instances chorea has been cut short by the supervention of one of the acute infectious diseases. In a little girl, 6 years old, a severe attack of scarlet fever cut short the chorea, which never returned. In another case, an attack of measles cured chorea of long standing; it returned, however, after the measles had left, but in a milder form. Chorea often returns. Of fifty-two cases, the author saw it return in five children *twice*, in one child *three* times, in two children *four* times; the interval varied from four months to two years. *With regard to treatment*, on the principle that chorea is, in the majority of cases, associated with anæmia, he gives iron alone, or in combination with nervine tonics, as zinci oxyd. If it be associated with rheumatism, he gives quinia and digitalis, but the most successful remedy in his hands has been

Fowler's tincture, which he has rarely found fail, especially if iron be given first. The largest dose in one day was eight drops, but he begins with a dose of one drop, and gradually increases it. Its use is not continued after fourteen days, if no benefit results. He also uses cold water in many cases, in the shape of wet sheets.—*Med. Times and Gaz.*, April 8, 1871.

15. *A Peculiar Form of Paralysis in Children from Cerebral Softening occurring in Patches.*—Dr. Th. Simon, of Hamburg, gives the details of three cases of this which occurred in the same family, in a boy of 4, a girl of 3, and a boy of 1¾ years of age. The course, so far as developed, was similar in the whole three cases, and a short description of the chief symptoms may give an idea of the disease. In all the cases rickets existed, and, as regards the central nervous system, there were observed certain disturbances of the mental faculties, chiefly manifested in deficiency of memory and of speech; the boy of 4 years, for instance, was scarcely so far advanced as an ordinary child of 2. There was also a considerable degree of paralysis of motion in the extremities, so that the children, after being able to walk, lost this power; yet sensibility did not seem to be affected, and the muscles contracted readily to electro-motor stimulation. In all the cases the disease developed itself slowly during the second year, so that in the case of the youngest child it was seen in its earlier stage. In the two elder children the affection got gradually worse, and peculiar soporific attacks supervened, which ended fatally in the case of the girl. In this fatal case the brain and cord were examined, and very large patches of softening were found, especially on the left cerebral hemisphere, while smaller patches of a similar nature existed on the right. To these three fully developed cases the author adds the case of a child only 2¾ months old, in which numerous small patches of softening were found on both hemispheres; and he supposes that, had this patient lived, the case would have developed as the three already described, while he further supposes that in the three first cases there may have been patches of softening from birth, but that they showed progressive increase from the beginning of the second year onwards.—*Glasgow Med. Journ.*, May, 1871, from *Virchow's Archiv*, Jan. 1871.

16. *Diphtheria of the Throat.*—Dr. A. Classen, of Rostock, considers (*Virchow's Archiv*, Feb. 1871) that diphtheria is primarily a local disease, and that it depends on a fungus which penetrates into the epithelial cells of the mucous membrane. The result of this penetration of the epithelial cells by the fungus is a greatly increased growth of epithelium, so that layers on layers of such cells are produced, and, at the same time, white and red blood-corpuscles pass from the vessels and mix with the diseased part. The exudation in diphtheria he considers to be composed chiefly of the changed epithelial cells and blood and pus corpuscles. The fungus he has detected in the very substance of the epithelial cells, and, as it is extremely minute, he supposes that it passes from the affected membrane into the bloodvessels, and there produces the constitutional symptoms, which are thus secondary to the primary affection of the mucous membrane. The presence of the fungus in the mucous membrane leads to irritation and inflammation of it, and the inflammation has the usual results; and as it is generally severe, it is commonly followed by sloughing of the mucous membrane. The author distinguishes diphtheria from croup on the one hand clinically, but on the other hand more absolutely on the ground of the presence of this fungus in diphtheria. In the early stages of diphtheria you may have only a false membrane on the surface of the mucous membrane, but this has its origin in the irritation produced by the fungus; whereas in croup there is always a simple inflammation, which is not generally so severe as that which occurs in diphtheria, and the mucous membrane is not generally involved in the exudation. In diphtheria the constitutional disturbance is greater than in croup, this being a natural result from the fungus passing into the blood. The alteration in the constitution of the blood effected by this fungus is considered to produce a tendency to hemorrhage, and the paralysis which is one of the common results of diphtheria is ascribed to hemorrhage into the sheaths of the nerves. To the same cause he ascribes the difficulty of hearing and seeing